



# UNITED STATES PATENT AND TRADEMARK OFFICE

mg

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,671	05/16/2005	K Barry Sharpless	TSRI 890.1	5282
26621	7590	11/26/2007		
THE SCRIPPS RESEARCH INSTITUTE OFFICE OF PATENT COUNSEL, TPC-8 10550 NORTH TORREY PINES ROAD LA JOLLA, CA 92037			EXAMINER POWERS, FIONA	
			ART UNIT	PAPER NUMBER
			1626	
			MAIL DATE	DELIVERY MODE
			11/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/516,671	<b>Applicant(s)</b> SHARPLESS ET AL.	
	<b>Examiner</b> Fiona T. Powers	<b>Art Unit</b> 1626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/13/07.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/24/07</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1626

Receipt is acknowledged of the amendment filed September 13, 2007 and the information disclosure statement filed September 24, 2007, which have been entered in the file.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not specify what is encompassed by the following phrases: "a 4-triazole substituent" ( $R^1$ ) and "a 1-triazole substituent" ( $R^2$ ).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 to 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because the claims do not specify what is meant by the following phrases: "a first reactant having a terminal alkyne moiety"; "second reactant having an azide moiety"; "product having a triazole moiety"; "a triazole"; "a polyvalent triazole"; "a polyazide core"; "a molecule having a terminal alkyne"; "a product containing a [1,2,3]-triazole"; "a first reactant having a monosubstituted alkyne"; and "reactant having an azide".

To overcome this rejection, the formulas for the reactants and products should be inserted into the claims. See page 12, line 5 of the specification, for example. Note that all variables in the formulas should be defined and the definitions must be supported by the specification.

Applicant's arguments filed September 13, 2007 have been fully considered but they are not persuasive. Applicants state that the written description requirement with respect to the phrases "4-triazole substituent" ( $R^1$ ) and "1-triazole substituent" ( $R^2$ ) is supported by the specification because 1) these phrases appear on various pages and figures of the

Art Unit: 1626

specification; 2) the numbering is conventional; and 3) one of skill in the art would understand that the scope of these phrases is broad. Applicants point to various references including Rostovtsev et al. and other references that cite Rostovtsev et al provided in the Evidentiary Appendix to support that one of ordinary skill in the art would know what is encompassed by these phrases. The examiner does not question whether the phrases "4-triazole substituent" ( $R^1$ ) and "1-triazole substituent" ( $R^2$ ) appear or have antecedent basis in the specification or the numbering used in the phrases. The statement that the scope of the process is broad and that the azides and acetylenes used in the invention can be variously substituted is not a description of what the substituents are. The references cited in the Evidentiary Appendix were published after the filing date of the instant application and cannot be relied upon to support that one of ordinary skill in the art would know what these phrases mean.

As regards the 112, second paragraph rejection, applicants state that the words and phrases pointed out by the examiner are definite under the rules of Miles Lab., Inc., b Shandon, Inc. 997 F. 2<sup>nd</sup> 870, 875, 27 USPQA 2D 1123, 1126 (Fed. Cir. 1993) and In re Moore, 169 USPQ 236, 238 (CCPA 1971). However, in light of the specification and the teachings of the prior art, one of

Art Unit: 1626

ordinary skill in the art would not know the bound of the claims. For example, the phrases mentioned by the examiner that contain the word "triazole" are indefinite because they include 1,2,4-triazoles and 1,3,4-triazoles that are not supported by the specification. The phrase "product containing a [1,2,3]-triazole" includes 1,2,3-triazoles that have substituents in the 1, 4 and 5 positions. It does not appear that these kinds of triazoles can be made by the processes disclosed in the specification.

No claim is allowed.

The references made of record and not relied upon show the state of the art.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1626

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fiona T. Powers whose telephone number is 571-272-0702. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/516,671

Page 7

Art Unit: 1626

*Fiona T. Powers*  
Fiona T. Powers  
Primary Examiner  
Art Unit 1626

ftp  
November 19, 2007